



Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

Northeast Regional Office • 205B Lowell Street, Wilmington MA 01887 • 978-694-3200

DEVAL L. PATRICK
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Secretary

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Commissioner

Mr. William Madden **Date Stamped Oct 27, 2011**
ARC Technologies, Inc.
11 Chestnut Street
Amesbury, Massachusetts 01913

Re: Final Approval of LPA for
Non-Fuel Emissions
at ARC Technologies, Inc.
11 Chestnut Street
Amesbury, Massachusetts 01913
Transmittal No: X239325
Application No. MBR-11-IND-019

Dear Mr. Madden:

The Metropolitan Boston/Northeast Regional Office of the Massachusetts Department of Environmental Protection ("MassDEP"), Bureau of Waste Prevention, has determined that the referenced Limited Plan Application ("LPA") is administratively complete and in conformance with current air pollution control engineering practices. MassDEP approves this LPA to specify federally enforceable volatile organic compounds (VOC) emission limitations resulting from the operation of five milling rooms, identified as Milling Room Numbers 1 through 5, at ARC Technologies, Inc. whose facility is comprised of three buildings, located at 11 Chestnut Street (Building Number 1), at 12 Oakland Street (Building Number 2), and at 144 Elm Street (Building Number 3), in Amesbury, Massachusetts ("the Facility"). ARC Technologies, Inc. manufactures radar absorbing materials. The subject five milling rooms will all be housed in Building Number 3 and each will process batches using an attritor, a dryer and a condenser. Each milling room currently uses heptane, a VOC, as a lubricant in the attritor. Following the attritor process, heptane is decanted off and saved for reuse in future batches. Next the remaining product and heptane is dried in a dryer and an associated condenser condenses out the heptane which is recovered for reuse in future batches.

ARC Technologies, Inc. is currently operating under the following MassDEP Air Quality Plan Approvals for previously approved equipment:

Approval Number and Date of Approval	Emission Units Approved (Building Number)	Emission Limits		
		PM	HAP	VOC
MBR-95-IND-049 Sept. 28, 1995 and modified on Sept. 30, 2002	Spray Booth #1 (BLDG #1) Spray Booth #2 (BLDG #1)	-	-	3 tons per consecutive twelve month time period
MBR-07-IND-018 Oct. 3, 2007	Spray Booth #3 (BLDG #1) Bulk solvent usage for cleaning (BLDG #1) Second floor spray booth (BLDG #1) Third floor spray booth (BLDG #1) New building thermoplastics spray booth (BLDG #2)	1.0 ton per consecutive twelve month time period (0.5 ton per month)	-	4.9 tons per consecutive twelve month time period (1 ton per month)
MBR-08-IND-016 Oct. 28, 2008	Spray Booth #4 (BLDG #3) Spray Booth #5 (BLDG #3) 2 Drying/curing ovens (BLDG #3) 2 Sanding operations (BLDG #3)	1.0 ton per consecutive twelve month time period (0.5 tons per month)	Facility-wide limit of 4 tons per consecutive twelve month time period (1 ton per month)	4 tons per consecutive twelve month time period (1 ton per month)

BLDG # = Building Number
PM=Particulate Matter
HAP = Hazardous Air Pollutant

This LPA Approval is in accordance with 310 CMR 7.02(1), (3) and (4) of the Air Pollution Control Regulations ("Regulations"), 310 CMR 7.00, as adopted pursuant to M.G.L. c. 111, Sections 142A-142K.

Included as part of the LPA Approval are the following:

Stamped Approved BWP AQ 01-B Application Form;
General Conditions for Non-Fuel Emissions LPAs;
Special Conditions; and
Appeal Rights.

Please review the entire LPA Approval carefully as it stipulates the conditions with which the Facility owner/operator must adhere for the Facility to be constructed/reconstructed/alterd and operated in compliance with the Regulations.

MassDEP has determined that the filing of an Environmental Notification Form ("ENF") with the Secretary of Energy and Environmental Affairs, for air quality purposes, was not required prior to this action by the MassDEP. Notwithstanding this determination, the Massachusetts Environmental Policy Act and Regulation 301 CMR 11.00, section 11.04, provide certain "Fail-Safe Provisions" which allow the Secretary to require the filing of an ENF and/or Environmental Impact Report at a later time.

Should you have any questions concerning this Approval, please contact Susan McConnell at (978) 694-3292 or at MassDEP, 205B Lowell Street, Wilmington, MA 01887.

Very truly yours,

*This final document copy is being provided to you electronically by the
Department of Environmental Protection. A signed copy of this document
is on file at the DEP office listed on the letterhead.*

Susan McConnell
Environmental Engineer
Bureau of Waste Prevention

James E. Belsky
Permit Chief
Bureau of Waste Prevention

Copy:

Amesbury Board of Health
Amesbury Fire Headquarters
DEP-NERO: M. Persky, M. Altobelli, S. McConnell
DEP-Boston: Y. Tian

Attachment: LPA-PROCESS (BWP AQ 01)

GENERAL CONDITIONS FOR NON-FUEL EMISSION LPAs

1. Operation - No person shall operate a facility constructed, substantially reconstructed, or altered pursuant to 310 CMR 7.02(1), (3) and (4) except in conformance with the requirements established therein and in conformance with the specific written plan approval requirements.
2. Record keeping – A recordkeeping system shall be established and continued on site. All records shall be maintained up-to-date such that year-to-date information is readily available for MassDEP examination. Recordkeeping shall, at a minimum, include:

- a) The initiation and completion dates for the proposed construction/reconstruction/alteration.
 - b) Maintenance. A record of routine maintenance activities including, at a minimum, a description of the maintenance performed and the date and time the work was completed.
 - c) Malfunctions. A record of all malfunctions including, at a minimum: the date and time the malfunction occurred; a description of the malfunction and the corrective action taken; the date and time corrective actions were initiated; and the date and time corrective actions were completed and the facility returned to compliance.
 - d) Records shall be maintained documenting the air contaminant emission analysis supporting the responses to BWP AQ 01 Section B.
 - e) All records shall be kept on site for five (5) years from date of record and shall be made available to MassDEP upon request.
3. Reporting - Any construction, substantial reconstruction or alteration, as described in 310 CMR 7.02(1), (3) and (4), at a facility subject to the reporting requirements of 310 CMR 7.12, shall be reported to MassDEP on the next required source registration.
4. MassDEP may revoke, in accordance with 310 CMR 7.02(3)(k), any plan approval if the actual construction has not begun within two years from the date of issuance or if, during the construction, the construction is suspended for the period of one year or more.
5. Noise from the Facility during construction, initial startup and routine operation, including startups and shutdowns, shall not exceed the MassDEP noise guidelines and shall not cause a condition of air pollution as defined in 310 CMR 7.01 and 7.10.
6. The Regional Bureau of Waste Prevention office must be notified by telephone or fax as soon as possible after the occurrence of any upsets or malfunctions to the facility equipment, air pollution control equipment, or monitoring equipment which result in an excess emission to the air and a condition of air pollution.
7. The Facility shall be constructed and operated in a manner to prevent the occurrence of dust or odor conditions which may cause or contribute to a condition of air pollution as defined in 310 CMR 7.01 and 7.09.
8. This Approval does not negate the responsibility of owner/operator of the referenced facility to comply with this or any other applicable federal, state, or local regulations now or in the future. Nor does this Approval imply compliance with any other applicable federal, state, or local regulations now or in the future.
9. This Approval may be suspended, modified, or revoked by MassDEP if, at any time, MassDEP determines that the Facility is violating any condition or part of this LPA Approval. MassDEP shall be notified in writing prior to any modification of the Facility such as a change in raw materials or an increase in production capacity, which may increase emissions.

10. Should asbestos remediation/removal be required as a result of the approved construction/reconstruction/or alteration of this Facility, such asbestos remediation/removal shall be done in accordance with Regulation 310 CMR 7.15 in its entirety and 310 CMR 4.00. MassDEP must be notified in writing, when the subject equipments has been installed and has been deemed ready for continuous operation, within fourteen days (14) thereof.
11. Emission Testing – The MassDEP may, in accordance with Regulation 310 CMR 7.13, require source emission testing (“stack testing”). All emission testing shall be conducted in accordance with the MassDEP’s Guidelines for Source Emission Testing and with 310 CMR 7.13.
12. The Facility shall be constructed and operated in strict accordance with the application approved herein. Should there be any differences between the aforementioned application and this approval letter, this approval letter shall govern.

SPECIAL CONDITIONS

1. ARC Technologies, Inc. shall ensure that total VOC emissions from the operation of the five subject milling rooms, identified as Milling Room Numbers 1 through 5 shall not exceed the following emissions limits:
 - a. 1.5 tons VOC per month; and
 - b. 7.5 tons VOC per any consecutive 12 month time period.
2. ARC Technologies, Inc. shall limit milling operations from the operation of Milling Room Numbers 1 through 5 on both a monthly and consecutive twelve month time period such that VOC emissions from milling operations performed in Milling Room Numbers 1 through 5 do not exceed the VOC emissions limits established in Special Condition No. 1 above.
3. That ARC Technologies shall maintain records of milling operations conducted in each of the subject milling rooms, identified as Milling Room Numbers 1 through 5, which shall include but shall not be limited to, quantity of VOC used per week per milling room, quantity of VOC recovered per week per milling room, VOC emissions per week per milling room, VOC emissions per month per milling room, VOC emissions per month in total for Milling Room Numbers 1 through 5, VOC emissions per any consecutive twelve month time period per milling room, and VOC emissions per any consecutive twelve month time period in total for Milling Room Numbers 1 through 5. These records shall be maintained on-site for a minimum of five years and shall be made available for review by MassDEP personnel upon request.
4. ARC Technologies, Inc. shall maintain all exhaust stacks serving the subject equipment consistent with good air pollution control engineering practice. All stacks shall discharge vertically so as to not cause or contribute to a condition of air pollution. No exhaust stack shall

be equipped with any part or device that restricts the vertical exhaust flow of the emitted gases. All stacks which exhaust from the subject equipment shall be a minimum of ten (10) feet above the height of the roof.

5. ARC Technologies, Inc. shall take immediate steps to abate any nuisance condition(s), including but not limited to visible emissions, noise, and odor, that may be generated by the operation of the subject Facility.
6. ARC Technologies, Inc. shall submit, in writing, an Exceedance Report to MassDEP should the Facility exceed any limitation/restriction limit specified in the Special Conditions of this Approval. Said Exceedance Report shall be submitted within seven (7) days of determination of the exceedance of the limitation/restriction. The Exceedance Report shall include identification, duration, and reason(s) for the exceedance, and the remedial action plan to prevent future exceedances.
7. ARC Technologies, Inc. shall maintain adequate on-site records to document compliance with the requirements and emission limitations as stated in the Special Conditions of this Approval. Said records shall be made available to MassDEP personnel upon request, and shall be kept on site for a minimum of five (5) years. An electronic Microsoft Excel version of the MassDEP approved format required to be used can be obtained at <http://www.mass.gov/dep/air/approvals/aqforms.htm#report>.
8. The visible emissions from this Facility shall not exceed 10 percent opacity.
9. All VOC containing materials shall be transported and stored in tightly covered containers.
10. Arc Technologies, Inc. shall investigate the feasibility of implementing alternative technologies or reformulated materials which will lead to the decrease of overall emissions from the subject Facility to the environment (air emissions, solvent waste, etc.). The Facility shall seek assistance from outside sources such as suppliers, vendors, and the Office of Technical Assistance (which is located at the Executive Office of Energy and Environmental Affairs, 100 Cambridge Street, Boston, Massachusetts, (Telephone No. 617-727-3260)). ARC Technology, Inc. personnel shall record any information supplied to them relative to reducing overall emissions and pollution prevention techniques. This information as well as any progress towards decreasing overall emissions to the environment shall be recorded in an Environmental Logbook (see Special Condition No. 11).
11. ARC Technologies, Inc. shall maintain an Environmental Logbook, or similar record keeping system, which shall document all actions associated with environmental issues and overall emissions changes at the Facility. The Facility shall record information such as the results of federal, state, or local environmental inspections; maintenance or corrective actions related to manufacturing; and measures taken to lower overall emissions to the environment (air, solvent waste, etc.). This Logbook, or similar, shall be made available to MassDEP personnel upon request.

12. That a copy of this Approval letter shall be affixed adjacent to the subject equipment.
13. This Approval consists of the application materials and this Approval letter. If conflicting information is found between these two documents, then the requirements of this Approval letter shall take precedence over the documentation in the application materials.
14. ARC Technologies, Inc. shall comply with all conditions contained in this Final Approval. Should there be any differences between conditions contained in the "General Conditions" and the conditions contained in the "Special Conditions" of this Approval, the "Special Conditions" shall govern.
15. ARC Technologies, Inc shall comply with applicable sections of 310 CMR 7.00 in its entirety for all future equipment installations and modifications.

APPEAL OF APPROVAL

This Approval is an action of MassDEP. If you are aggrieved by this action, you may request an adjudicatory hearing. A request for a hearing must be made in writing and postmarked within twenty-one (21) days of the date of issuance of this Approval.

Under 310 CMR 1.01(6)(b), the request must state clearly and concisely the facts that are the grounds for the request, and the relief sought. Additionally, the request must state why the Approval is not consistent with applicable laws and regulations.

The hearing request along with a valid check payable to Commonwealth of Massachusetts in the amount of one hundred dollars (\$100.00) must be mailed to:

Commonwealth of Massachusetts
Department of Environmental Protection
P.O. Box 4062
Boston, MA 02211

The request will be dismissed if the filing fee is not paid, unless the appellant is exempt or granted a waiver as described below.

The filing fee is not required if the appellant is a city or town (or municipal agency), county, or district of the Commonwealth of Massachusetts, or a municipal housing authority.

MassDEP may waive the adjudicatory hearing filing fee for a person who shows that paying the fee will create an undue financial hardship. A person seeking a waiver must file, together with the hearing request as provided above, an affidavit setting forth the facts believed to support the claim of undue financial hardship.